## Final

# Environmental Impact Statement

for a

Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada

> Volume II Appendixes A through O



U.S. Department of Energy Office of Civilian Radioactive Waste Management

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#### **ACRONYMS AND ABBREVIATIONS**

To ensure a more reader-friendly document, the U.S. Department of Energy (DOE) limited the use of acronyms and abbreviations in this environmental impact statement. In addition, acronyms and abbreviations are defined the first time they are used in each chapter or appendix. The acronyms and abbreviations used in the text of this document are listed below. Acronyms and abbreviations used in tables and figures because of space limitations are listed in footnotes to the tables and figures.

CFR Code of Federal Regulations

DOE U.S. Department of Energy (also called *the Department*)

EIS environmental impact statement

EPA U.S. Environmental Protection Agency

FR Federal Register

LCF latent cancer fatality

MTHM metric tons of heavy metal

NEPA National Environmental Policy Act, as amended

NRC U.S. Nuclear Regulatory Commission NWPA Nuclear Waste Policy Act, as amended

 $PM_{10}$  particulate matter with an aerodynamic diameter of 10 micrometers or less  $PM_{2.5}$  particulate matter with an aerodynamic diameter of 2.5 micrometers or less

REMI Regional Economic Models, Inc.

RMEI reasonably maximally exposed individual

Stat. United States Statutes

TSPA Total System Performance Assessment

U.S.C. United States Code

#### UNDERSTANDING SCIENTIFIC NOTATION

DOE has used scientific notation in this EIS to express numbers that are so large or so small that they can be difficult to read or write. Scientific notation is based on the use of positive and negative powers of 10. The number written in scientific notation is expressed as the product of a number between 1 and 10 and a positive or negative power of 10. Examples include the following:

Positive Powers of 10	Negative Powers of 10
$10^1 = 10 \times 1 = 10$	$10^{-1} = 1/10 = 0.1$
$10^2 = 10 \times 10 = 100$	$10^{-2} = 1/100 = 0.01$
and so on, therefore,	and so on, therefore,
$10^6 = 1,000,000$ (or 1 million)	$10^{-6} = 0.000001$ (or 1 in 1 million)

Probability is expressed as a number between 0 and 1 (0 to 100 percent likelihood of the occurrence of an event). The notation  $3 \times 10^{-6}$  can be read 0.000003, which means that there are three chances in 1,000,000 that the associated result (for example, a fatal cancer) will occur in the period covered by the analysis.

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